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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,131	11/19/2003	Hideshi Onishi	225270	7268

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EXAMINER	
WU, IVES J	

ART UNIT	PAPER NUMBER
1713	

DATE MAILED: 03/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/717,131	ONISHI ET AL.	
	Examiner	Art Unit	
	Ives Wu	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 4/12/04.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-8 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-8 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 4/12/04.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

(1). **Claims 1 - 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenji et al (JP 2000-053812) in view of Oneshi et al (EP-1043361).

(2). Kenji et al (JP 2000-053812) disclose a resin composition and multilayer structure (Title). This resin composition comprises: (A). a thermoplastic resin, (B) an ethylene-vinyl acetate copolymer saponified product, (C) an inorganic filler, (D) a higher fatty acid metal salt, (E) and, preferably a hydrotalcite compound.

* The content of component A (thermoplastic resin) is 30 to 99 wt%.

* The content of component B (ethylene-vinyl acetate copolymer) saponified

product is 0.5 to 20 wt%.

* The content of component D (higher fatty acid metal salt) is 0.001 to 10 pts by wt of 100 parts by wt of total amount of (A), (B) and (C) (Abstract).

* The content of component E (hydrotalcite compounds) is 0.001 to 10 wt% based on 100 wt of components (A), (B), (C) ([0023], line 1).

The thermoplastic component A is not restricted but polyolefin system resin, polyamide system resin, polyester system resin, moreover, these may be used independently, or they may be used for two sorts, using together ([0011], line 2-5).

As to the component B –EVOH use for the patentee's invention, therein that has a composition of 10 ~ 70 mol% of the ethylene-content, and 90 mol% or higher % of saponification of vinyl acetate, preferably 95 mol% or higher is used for component B-EVOH.

Moreover, the resin constituent is useful on the multilayer-structure object having configuration in the following detailed layer structures: ([0010])

Thermoplastic resin layer/resin composite layer of the patentee's invention/ adhesive resin layer/EVOH layer;

Thermoplastic resin layer/resin composite layer of the patentee's invention/ adhesion resin layer/EVOH layer/adhesive resin layer/adhesive resin layer/thermoplastic resin layer;

Thermoplastic resin layer/resin composite layer of patentee's invention/adhesive resin layer/EVOH layer/adhesive resin layer/resin composite layer of the patentee's invention/thermoplastic resin layer;

Resin composite layer of patentee's invention/adhesive resin layer/EVOH layer;

Resin composite layer of patentee's invention/adhesive resin layer/EVOH layer/adhesive resin layer/EVOH layer;

Resin composite layer of patentee's invention/adhesive resin layer/EVOH layer/adhesive resin layer/thermoplastic resin layer;

Resin composite layer of patentee's invention/adhesive resin layer/EVOH layer/adhesive resin layer/Resin composite layer of patentee's invention/thermoplastic resin layer ([0031]);

(3). As to the metal soap component obtained by a heat reaction by a dry direct method of one or more kinds of aliphatic monocarboxylic acid having 12 to 30 carbon atoms and an oxide or hydroxide of group II metal of the periodic table, represented by the formula of αMO-$M(OOCR)_2$ - wherein α to be a number of 0.1-1.0, M to be a divalent metal of group II, and R to be a saturated or unsaturated alkyl group having 11 to 29 carbon atoms in **independent claim 1**, Kenji et al **teach** the higher fatty acid metal salt with a carbon numbers of 8 or more, higher fatty acid metal salt to be desirable. Alkaline earth metal salts, such as alkali metal salts, sodium salt of higher fatty acids, such as nonadecane acid, oleic acid, a capric acid, behenic acid and metal salt, magnesium salt, a calcium salt, and barium salt, a zinc metal salt ([0016], line 1-6).

Kenji et al **do not teach** the formula of metal salt as claimed and process of making the metal salt.

However, Onishi et al (EP-1043361A1) **teach** the metal soap with the formula as claimed, and obtained by reacting one or more species of aliphatic monocarboxylic acid containing 12 – 30 carbon atoms with an oxide or hydroxide of a metal belonging to group 2 of the periodic table by a dry direct method (page 1, (57)).

The advantages of using dry direct method to obtain the metal soap with the formula as claimed is to have metal content greater than the equimolar amount by 0.1 ~ 1.0 where other methods are difficult to get this metal content ([0028], line 5-6, 7-10).

Therefore, it would have been obvious at time the invention was made to employ the dry direct method of Onishi et al to obtain the metal salt of Kenji et al in order to acquire the above-mentioned advantage.

As to the wt ratio of polyolefin resin/ethylene-vinyl acetate copolymer to be 95/5 – 30/70 in **dependent claims 3** and **4**, the content of thermoplastic resin in an amount of 30 to 99 wt% and ethylene-vinyl acetate copolymer in an amount of 0.5 to 20 wt% would have the ratio falling into the range as claimed, such as 20 wt% of thermoplastic and 10 wt% of ethylene-vinyl acetate copolymer.

As to the layer containing a saponified product of an ethylene-vinyl acetate copolymer having ethylene-content of 20 to 65 mol% and a saponification degree of not less than 90 mol% in **dependent claims 5, 6, 7** and **8**, the disclosure of Kenji et al and Onishi et al is disclosed herein by reference. The most subject matters of ethylene content and saponification degree in the ethylene vinyl acetate copolymer as claimed has been recited in applicant's claim 1, and has been disclosed in the paragraph (2).

As to the layer of resin composition added to a collectable material in the dependent **claims 5, 6, 7** and **8,** Kenji et al disclose the multilayer laminate in the paragraph (2).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ives Wu whose telephone number is 571-272-4245. The examiner can normally be reached on 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner: Ives Wu
Art Unit: 1713
Date: March 15, 2006

DAVID W. WU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700